nformation Update

# Guidelines for Estimating
# Elk Velvet Bull Costs
## Based on A Herd of 30 Head

**Date: February, 2000**

This guide is designed to provide you with planning information and a format for calculating costs of production on a 30 elk velvet bull enterprise. The production costs included in this enterprise budget are not intended as a cost study of the elk industry in Manitoba.

The budget estimates are based on a number of assumptions which are clearly defined in the supporting pages. Input costs are based on recommended practices and/or information obtained from producers. Good management is assumed in that a balanced ration is being fed, livestock are on a herd health program and handling facilities are included.

The budget may be adjusted by putting your figures in the appropriate column. Each producer is encouraged to determine their own costs of production based on their own inputs, pasture program and management.

## ELK VELVET BULL PRODUCTION COST SUMMARY - 2000

(Based on 30 head)

| A. OPERATING COSTS | $/BULL | $/LB | TOTAL | Your Cost |
|---|---|---|---|---|
| 1. Feed Costs: | | | | |
| 1.01 Hay | $81.00 | $4.76 | $2,430 | |
| 1.02 Grain | 56.70 | 3.34 | 1,701 | |
| 1.03 Salt & Minerals/Supplements | 49.28 | 2.90 | 1478 | |
| **Total Feed Cost** | **$186.98** | **$11.00** | **$5,609** | |
| 2. Other Operating Costs: | | | | |
| 2.01 Vet. Medicine & Supplies | 20.00 | 1.18 | 600 | |
| 2.02 Fuel, Mtce. & Repairs | 30.00 | 1.76 | 900 | |
| 2.03 Utilities | 8.33 | 0.49 | 250 | |
| 2.04 Marketing Costs | 15.00 | 0.88 | 450 | |
| 2.05 Death Loss | 30.00 | 1.76 | 900 | |
| 2.06 Insurance | 28.16 | 1.66 | 845 | |
| 2.07 Herd Replacement | 100.00 | 5.88 | 3,000 | |
| 2.08 Land Taxes | 5.00 | 0.29 | 150 | |
| 2.09 Miscellaneous | 4.17 | 0.25 | 125 | |
| Subtotal Operating Costs | 427.64 | 25.15 | 12,829 | |
| 2.10 Operating Interest | 18.17 | 1.07 | 545.1 | |
| **TOTAL OPERATING COSTS** | **$445.81** | **$26.22** | **$13,374** | |
| **B. FIXED COSTS** | | | | |
| 3. Depreciation | | | | |
| 3.01 Buildings | 29.85 | 1.76 | 896 | |
| 3.02 Machinery & Equipment | 7.12 | 0.42 | 214 | |
| 3.03 Fence | 13.50 | 0.79 | 405 | |
| 4. Investment | | | | |
| 4.01 Buildings | 20.07 | 1.18 | 602 | |
| 4.02 Machinery & Equipment | 4.01 | 0.24 | 120 | |
| 4.03 Livestock | 165.00 | 9.71 | 4,950 | |
| 4.04 Pasture Land & Fencing | 20.08 | 1.18 | 602 | |
| **TOTAL FIXED COSTS** | **$259.63** | **$15.28** | **$7,789** | |
| **C. LABOUR COSTS** | **$50.00** | **$2.94** | **$1,500** | |
| **TOTAL COST OF PRODUCTION** | **$755.44** | **$44.44** | **$22,663** | |

# ELK VELVET BULL PRODUCTION COST WORKSHEET - 2000

## Assumptions

1. This budget outlines the costs for a 30 head elk bull velveting enterprise

2. All feed is valued at fair market value.

3. Death loss was estimated at 1%.

4. Production of velvet antlers was assumed to average 17 lbs per year over the 10 years of productive life.

5. The Elk enterprise is situated on as 20 acre parcel of land with an average value of $300 per acre. A perimeter fence of .75 miles valued at $9,000 was also included.

## A. OPERATING COSTS

| | | | | Your Cost |
|---|---|---|---|---|
| **1. Feed Costs:** | | | | |
| **1.01 Hay Costs** | | | | |
| | | 5.00 | kg hay/day | _____ |
| | x | 270 | days/year | _____ |
| | ÷ | 1,000 | kg/tonne | _____ |
| | x | $60.00 | /tonne | _____ |
| | = | **$81.00** | **/bull** | _____ |
| **1.02 Grain Costs** | | | | |
| | | 2.00 | kg oats/day | _____ |
| | x | 270 | days/year | _____ |
| | ÷ | 1,000 | kg/tonne | _____ |
| | x | $105.00 | /tonne | _____ |
| | = | **$56.70** | **/bull** | _____ |

| | | | | Your Cost |
|---|---|---|---|---|
| **1.03 Supplement Costs** | | | | |
| | | 0.50 | kg supp/day | |
| | x | 365 | days/year | |
| | + | 1,000 | kg/tonne | |
| | x | $270.00 | /tonne | |
| | = | **$49.28** | **/bull** | |

**2. Other Operating Costs:**

**2.01 Veterinary Medicine & Supplies**

| | | | |
|---|---|---|---|
| parasite control | | **$20.00** | **/bull** |

**2.02 Fuel, Oil, Repairs & Maintenance**

| | | | | |
|---|---|---|---|---|
| Machinery | | $300.00 | annual fuel cost | |
| | + | $200.00 | oil, repairs & maintenance | |
| | = | $500.00 | total cost | |
| | + | 30 | bulls | |
| | = | $16.67 | /bull | |
| Buildings,Fences etc. | | $400.00 | annual repair & mtc. | |
| | + | 30 | bulls | |
| | = | $13.33 | /bull | |
| Total | = | **$30.00** | **/bull** | |

**2.03 Utilities**

| | | | | |
|---|---|---|---|---|
| | | $250.00 | annual utilities costs | |
| | + | 30 | bulls | |
| | = | **$8.33** | **/bull** | |

**2.04 Marketing Costs**

| | | | | |
|---|---|---|---|---|
| | | $450.00 | marketing antlers & culls | |
| | + | 30 | bulls | |
| | = | **$15.00** | **/bull** | |

| | | | | Your Cost |
|---|---|---|---|---|
| **2.05 Death Loss** | | | | |
| | x | $3,000 | /bull investment | |
| | x | 1.0 | (%) Mortality Rate | |
| | = | **$30.00** | **/bull** | |
| **2.06 Insurance** | | | | |
| | | $23,300 | bldg & equip investment | |
| | x | $0.60 | cost/$100 capital | |
| | ÷ | 100 | | |
| | ÷ | 30 | bulls | |
| | = | $4.66 | /bull | |
| | | $90,000 | herd investment | |
| | x | $0.75 | cost/$100 capital | |
| | ÷ | 100 | | |
| | ÷ | 30 | bulls | |
| | = | $22.50 | /bull | |
| | | $30 | add'l coverage for liability | |
| | ÷ | 30 | bulls | |
| | = | $1.00 | /bull | |
| Total Insurance | = | **$28.16** | **/bull** | |
| **2.07 Herd Replacement** | | | | |
| | | $3,000 | /replacement bull | |
| | - | $2,000 | /cull bull | |
| | = | $1,000 | net cost | |
| | x | 10.00 | % replacement rate | |
| | = | **$100.00** | **/bull** | |
| **2.08 Land Taxes** | | | | |
| | | $150 | land taxes | |
| | ÷ | 30 | bulls | |
| | = | **$5.00** | **/bull** | |

| | | | Your Cost |
|---|---|---|---|
| **2.09 Miscellaneous** | | | |
| | $25.00 | antler removal course | _____ |
| + | $100.00 | license | _____ |
| + | 30 | bulls | _____ |
| = | **$4.17** | **/bull** | _____ |
| **2.10 Operating Interest** | | | |
| | $427.64 | subtotal operating costs | _____ |
| + | 2 | average | _____ |
| x | 8.50 | % operating interest rate | _____ |
| = | **$18.17** | **/bull** | _____ |

| | | Your Cost |
|---|---|---|
| **Capital Costs** | | |
| Buildings & Improvements | | |
| Building & Handling Facilities | $14,000 | |
| Waterers (2 @ $ 1000) | $2,000 | |
| Well & Pressure System | $3,500 | |
| Hydro (1 pole @ $400) | $400 | |
| Total Building Cost | $19,900 | |
| Machinery | | |
| Tractor & Loader | 2,000 | |
| Miscellaneous Machinery | 400 | |
| Freezer | 1,000 | |
| Total Machinery Cost | $3,400 | |
| Land & Fence | | |
| Fence (.75 miles @ $12,000/m) | $9,000 | |
| Pasture (20 ac @ $300) | $6,000 | |
| Total | $15,000 | |
| Livestock | | |
| Bulls (30 @ $3,000) | $90,000 | |
| Total Capital Investment | $128,300 | |

**B. FIXED COSTS**

**3. Depreciation:**

$$\frac{\textit{Original Value - Salvage Value}}{\textit{Useful Life}}$$

**3.01 Buildings & Improvements**

| | | | Your Cost |
|---|---|---|---|
| | $19,900 | original value | |
| - | $1,990 | salvage value | |
| ÷ | 20 | years useful life | |
| ÷ | 30 | bulls | |
| = | **$29.85** | **/bull** | |

| | | | | Your Cost |
|---|---|---|---|---|
| **3.02 Machinery & Equipment** | | | | |
| Tractor & Loader | | $2,000 | original value | |
| | x | 100.00 | % usage for Elk | |
| | = | $2,000 | portion for elk | |
| | - | $600 | salvage value | |
| | = | $1,400 | net cost | |
| | ÷ | 10 | years useful life | |
| | ÷ | 30 | bulls | |
| | = | $4.67 | /bull | |
| Miscellaneous | | $400 | original value | |
| | - | $80 | salvage value | |
| | = | $320 | Net Cost | |
| | ÷ | 12 | years useful life | |
| | ÷ | 30 | bulls | |
| | = | $0.89 | /bull | |
| Freezer | | $1,000 | original value | |
| | - | 300 | salvage value | |
| | = | 700 | net cost | |
| | ÷ | 15 | years useful life | |
| | ÷ | 30 | bulls | |
| | = | $1.56 | /bull | |
| Total | | **$7.12** | **/bull** | |
| **3.03 Fence** | | | | |
| | | $9,000 | original value | |
| | - | $900 | salvage value | |
| | ÷ | 20 | years useful life | |
| | ÷ | 30 | bulls | |
| | = | **$13.50** | **/bull** | |

**Your Cost**

**4. Investment:** $\frac{\textit{Original Value + Salvage Value}}{2}$ ***x Investment Rate***

**4.01 Buildings & Improvements**

| | | | |
|---|---|---|---|
| | $19,900 | original building value | _____ |
| + | $1,990 | salvage value | _____ |
| + | 2 | average | _____ |
| x | 5.50 | investment rate | _____ |
| + | 30 | bulls | _____ |
| = | **$20.07** | **/bull** | _____ |

**4.02 Machinery & Equipment**

| | | | |
|---|---|---|---|
| Tractor and Loader | $2,000 | original Value | _____ |
| x | 100.00 | % usage for Elk | |
| = | $2,000 | portion for elk | _____ |
| + | $600 | salvage value | _____ |
| = | $2,600 | net value | _____ |
| + | 2 | average | _____ |
| x | 5.50 | investment rate | _____ |
| + | 30 | bulls | _____ |
| = | $2.38 | /bull | _____ |
| Miscellaneous | $400 | original value | _____ |
| + | $80 | salvage value | _____ |
| = | $480 | net value | _____ |
| + | 2 | average | _____ |
| x | 5.50 | investment rate | _____ |
| + | 30 | bulls | _____ |
| = | $0.44 | /bull | _____ |
| Freezer | 1,000 | original value | _____ |
| + | 300 | salvage value | _____ |
| = | 1,300 | net value | _____ |
| + | 2 | average | _____ |
| x | 6 | investment rate | _____ |
| + | 30 | bulls | _____ |
| = | $1.19 | /bull | _____ |
| Total | **$4.01** | **/bull** | _____ |

| | | | | Your Cost |
|---|---|---|---|---|
| **4.03 Livestock** | | | | |
| | | $3,000 | /bull | |
| | x | 5.5 | investment rate | |
| | = | **$165.00** | **/bull** | |
| **4.04 Pasture Land & Fencing** | | | | |
| Fence Investment | | $9,000 | original value | |
| | + | $900 | salvage value | |
| | = | $9,900 | net value | |
| | ÷ | 2 | average | |
| | x | 5.50 | investment rate | |
| | ÷ | 30 | bulls | |
| | = | $9.08 | /bull | |
| Land Investment | | $6,000 | original value | |
| | x | 6 | investment rate | |
| | ÷ | 30 | bulls | |
| | = | $11.00 | /bull | |
| **Total** | = | **$20.08** | **/bull** | |
| **C. LABOUR COSTS** | | | | |
| | | 5 | hours/bull | |
| | x | $10.00 | hourly rate | |
| | = | **$50.00** | **/bull** | |

**For more information contact your local Manitoba Agriculture and Food office.**

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